

S-C 3070 ELECTRONIC PRINTER

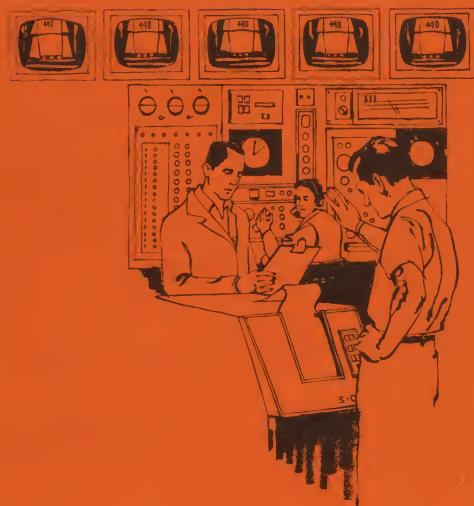




Shown above is an S-C 3070 Electronic Printer operating with an IBM 1620 computer. Typical of other small or medium-sized computers with which the S-C 3070 may be used are Univac M1218 and Burroughs D825.



Eight S-C 3070's are now operating in the Space Flight Operations Facility (shown above) which is operated by the California Institute of Technology's Jet Propulsion Laboratory in Pasadena, Calif.



The S-C 3070 is an electronic printer for use in Electronic Data Processing and Digital Communication Systems. It asynchronously prints, a character at a time, upon receipt of signals from a digital computer, high speed teletype terminal, or other data handling devices.

The S-C 3070 Electronic Printer utilizes an electrostatic process to produce highly legible permanent copy. Multiple copies of the output can easily be obtained by using the original as a litho master or by standard office copy methods. In the electrostatic printing process, images of displayed symbols are optically projected onto electrically charged sensitized paper. Photon bombardment discharges the paper in accordance with the optical image and a latent electrostatic image is formed. Development of these electrostatic images is accomplished by brushing the surface of the paper with a dry powdered ink consisting of small black particles of thermosetting plastic. The particles adhere to the latent electrostatic images, developing clear, legible symbols. The developed paper is subjected to heat which melts the particles and fuses them to the paper, resulting in permanent copy that can be handled without smudging or smearing.

The S-C 3070's electrostatic printing process takes full advantage of the superior speed and resolution characteristics of the CHARACTRON® Shaped Beam Tube. Alphanumeric characters and symbols are formed very simply by directing the electron beam through character-shaped openings in a tiny stencil within the tube. Various character fonts and styles, special symbols, and desired character codes can be supplied such as Fieldata, Baudot, IBM, and others. The printer is designed to operate up to speeds of 5,000 words per minute.

Compact dimensions, cool and quiet operation make the S-C 3070 ideal for offices, communications or computer centers. Reliable unattended operation results from the unit's non-impact printing concept and field-proven electronic circuitry. Ease of maintenance is assured through modular design and readily replaceable printed circuit boards.

The S-C 3070 can be provided to operate on-line or off-line with digital computer systems, and is compatible with most available data transmission terminals, including Bell System DATA-PHONE Service, General Dynamics/Electronics' Binary Data Transceiver, Collins Kineplex System and others.

S-C 3070 TECHNICAL DATA

OPERATING SPEED

Up to 5,000 words per minute.

INPUT SIGNALS

Basic inputs are parallel-wire binary coded data. Input signal levels: Space level (Binary 0) is -0.75 to $+8$ volts. Mark level (Binary 1) is -6 to -20 .

OUTPUT

Line width 7.2 inches. 72 or 120 characters per line, 5 lines per inch. Continuous line plotting with half line advance available on special order.

ACCESS TIME

Output copy may be viewed less than 3 seconds after receipt of input signals.

CHARACTER GENERATOR

CHARACTRON® Shaped Beam Tube.

PRINTABLE CHARACTERS

Of 64 available codes, normally two are reserved for space functions and one for carriage return/line feed, leaving 61 printable symbols. Special character and/or symbol repertoires available for specific requirements.

CIRCUITRY

Completely solid state with exception of CRT.

PRINTING METHOD

CRT image is optically recorded on an electrostatically charged recording paper.

PAPER

Electrostatic recording paper. 8 1/2 inch width by 1,000 ft. length. (Can be used as offset master.)

PAPER FEED

Line-at-a-time advance.

INPUT POWER

117 volts, 60-cycle, single-phase, less than 1100 watts.

SIZE

43 inches high; 37 inches long; 25 inches wide.

WEIGHT

Less than 400 pounds.

OPERATING TEMPERATURE

$+32^{\circ}\text{F}$ to $+125^{\circ}\text{F}$.

RELATIVE HUMIDITY

15 to 90%.

OPTIONAL FEATURES AVAILABLE:

B-10 Serial Teletype Converter—5 level. (includes B-80)

B-20 Input Register.

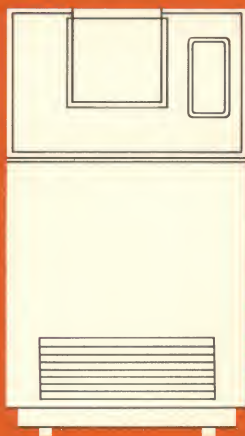
B-30 Input register/Parity check.

B-50 Ready Line and Start Data.

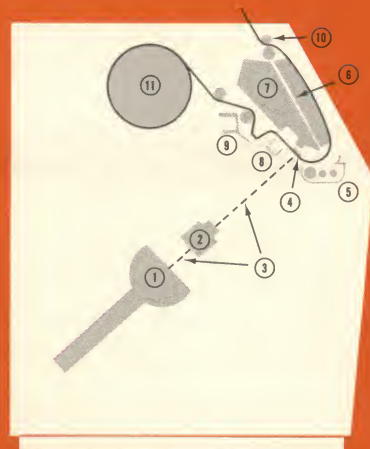
B-60 Tab Control.

B-70 Paper Take-up Reel.

B-90 Line Frequency Compensator.



1. CHARACTRON® SHAPED BEAM TUBE
2. LENS
3. DISTANCE RATIO APPROXIMATELY 1:2
4. EXPOSURE STATION
5. DEVELOPING STATION
6. FUSER
7. CLAM SHELL ASSEMBLY
8. CHARGE STATION
9. PAPER LOOP CONTROL
10. STEP PAPER ADVANCE ROLLS
11. PAPER SUPPLY ROLL



STROMBERG-CARLSON

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